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Compi	ete if Known		
Application Number	08/944,850		
Filing Date	October 6, 1997		
First Named Inventor	D.R. Walt	_	
Group Art Unit	1313		
Examiner Name	Not Assigned	\dashv	
Attorney Docket Number	TU97-01	\neg	

		LIE BOLES		U.S. PATENT DOCU	MENTS	
Examiner Initials*	No.1	U.S. Patent D	Kind Code ²	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	AA	5690894	_	· Pinkel, et al.	11/25/97	гідогез Аррааг
	AB	-5496399		Pope	3/5/96	
\leftarrow	AC	5573909		Singer,et al.	11/12/96	
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)	AF	- 5252494 -	-	Walt	10/12/93	, , , , , , , , , , , , , , , , , , , ,
*	AG	5114864		Walt	5/19/92	
	AH	5633972		Walt,ct al.	5/27/97	
	AI	5512490		Walt, et al.	4/30/96	
	AJ	5320814		Walt, ct al.	6/14/94	
	AK .	5298741		Walt, et al.	3/29/94	
	AL AM	525026 4		Walt, et al.	10/5/93	
		5254477		Walt	10/19/93	
	AN	3244813	-	Walt, ct al.	9/14/93	
	AO AP	5244636		Walt, et al.	9/14/93	
		3143853	\rightarrow	Walt, ct al	9/1/92	
	AQ	4822746		Walt	4/18/89	
	AR	5002867	7-4	Macevicz	3/26/91	
	AS	5814524	=	Walt, ct al.	9/29/98	
	AT I	5105305		Betzig, et al.	4/14/92	

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Examiner Initials	Cite No.1	Office	Foreign Patent Do Number4		Name of Patentee or Applicant of Cited Document		Date of Publi Cited Doci	ument	Pages, Columns, Lines, Where Relevant Passages or Relevant	
	FA	wo	9714928	A	Luminex Corp.	+	MM-00-Y	777	Figures Appear	1e
	FB	WO.	9302360	- A	Transmed Biotech Inc.		2/4/93			+-
	FC FD	WO EP	8911101		Michael John Holmes	_	11/16/80			
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Application Number	08/944,850				
Fliing Date	October 6, 1997				
First Named Inventor	D.R. Walt				
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Attorney Docket Number	TU97-01				

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Examiner Initials	Cite No.1	Number	cument ind Code? Il known)	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	BA			Choung	3/16/93	
	BB	5132242	7	- Cheung	7/21/92	
	BC	3565324	. V	Still, et al.	10/15/96	
45/	BD.	- 4785814 -	-	Kane	11/22/88	
띪	BE	- 4200110 -	- /	Peterson, et al.	4/29/80	
ANK OFFICE	BF	4682895	_	Costello	7/28/87	
No.	BG	- 5302509 -	-	Cheeseman	4/12/94	
	ВН	5494798		Gerdt, et al.	2/27/96	
	BI	543572 4	-	Goodman, et al.	7/25/95 -	
	BJ	SN 08/818,19	9-	Walt, et al.	Filed 3/14/97	
	BK	SN 08/851,20	3.	Walt, et al.	Filed 5/5/97	
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				FORE	IGN PATENT DOCUMENTS	
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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

Complete if Known **Application Number** 08/944,850 Filing Date October 6, 1997 First Named Inventor D.R. Walt Group Art Unit 1313 **Examiner Name** Not Assigned Attorney Docket Number TU97-01

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 		OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate). title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issuu number(s), publisher, city and/or country where published.	-
J'CE	LA	E.J.A. Pope, "Fiber Optic Chemical Microsensors Employing Optically Active Silica Microspheres", 3PIE, v2388,p245-256 (1995)	1
SK OFFICE	LB	J.I. Peterson, et al., "Fiber Optic pH Probe for Physiological Use", Anal. Chem., v52, no 6, May 1980, p864-869	1
TRANCAS.	LC	Anonymous, "Fluorescent Microspheres", Teon Note 19, Bang Laboratories, (Fishers, IN) February 1997	+
	LD	L.B. Bangs, "Immunological Applications of Microspheres", The Latex Course, Bangs Laboratories (Carmel, IN) April 1996	+
	LE	Anonymous, "Microsphere Selection Guide", Bangs Laboratories (Fishers, IN) September 1998	1
	LF	J.A. Ferguson, et al., "A Fiber-Optic DNA Biosensor Microarray for the Analysis of Gene Expression", Nature Biotechnology, v. 14, pp 1081-1684 (December 1996)	\dagger
	LG	B.G. Healey, et al., "Fiber Optic DNA Sensor Army Capable of Detecting Point Mutations", Analytical Biochemistry, v. 251, no. 2, pp270-2/19 (1997)	
·	LH	B.G. Healey, et al., "Development of a Penicillin Biosensor Using a Single Optical Imaging Fiber", SPIE Proc., v. 2388, pp 568-573 (1995)	\dagger
	LI	B.G. Healey, et al., "Improved Fiber-Optic Chemical Sensor for Penicillin, Anal. Chem, v. 67, no. 24, pp 4471-4476 (December 15, 1995)	
	L,J	D.R. Walt, "Fiber-Optic Sensors for Continuous Clinical Monitoring", Proc. IEEE, v.80, no.6, pp903-911 (June 1992)	
I	[1	N.J.C. Strachan, et al., "A Rapid General Method/for the Identification of PCR Products Using a Fibre-Optic Biosensor and Its Application to the Detection of Listeria", Ltrs. Applied Microbiology, v. 21, pp 5-9 (1995)	

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Application Number	08/944,850					
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First Named Inventor	D.R. Walt	_				
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Examiner Name	Not Assigned					
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7	Examiner Initials	Cite No.¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	L5
	rom Cra	LL	P.A.E. Piunno, et al., "Fiber-Optic DNA Sensor for Fluorometric Nucleic Acid Determination", Anal. Chem. v. 67, pp 2635-2643 (1995)	
,	PAN OF FICE	LM	A.P. Abel, et al., 'Fiber Optic Evanescent Wave Biosensor for the Detection of Oligonucleotides', Anal. Chem., v. 68, no. 17, pp 2905-2912 (September 1, 1996)	
<u>1</u>	IADIC	LN	P. Pantano, et al., "Ordered Nanowell Arrays", Chem. Mater., v. 8, no. 12, pp 2832-2835 (1996)	
		LO	K.L. Michael, et al., "Fabrication of Micro- and Nanostructures Using Optical Imaging Fibers and there Use as Chemical Sensors' Proc. 3rd Ind. Symp., Microstructures and Microfabricated Systems, ed. P.J. Hesketh, et al., v. 97-5, Electrochem. Soc., pp 152-157 (August 1997)	
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